**Algebra I Curriculum at a Glance**

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| **1st 6 weeks** | **2nd 6 Weeks** | **3rd 6 Weeks** | **4th 6 Weeks** | **5th 6 Weeks** | **6th 6 Weeks** |
| **Exponents (8-9 days)**  Exponent Rules A11A  **Expressions (7 days)**  Evaluate & Write  Expressions/Inequalities (include f(x) & f(2))  A3A, A4C  Embed: Order of Operations, + use Commutative/Associative Property verbage  Distributive Property (Imbed Fractions & Decimals) A4B  **Solving One-Variable Equations (12-13 days)**  Solving One, two, and multi-Step Equations—include the term “zeros” and include word problems A4A, A7A - C  Solve equations with variables on both sides of the equation include word problems A4A, A7A-C  Manipulating Literal Equations A4A | **Foundations of Functions (11 days)**  Representing Functions as Rules and Tables A1A A2B  Represent Functions as Graphs (Include Continuous and Discrete Functions) (Embed plotting points on Coordinate plane) A2B, A1B A1D  Qualitative Graphs A2C, Parent function labs A11C  Multiple Representations, Other Function Patterns  Compare Linear, Quadratic, Exponential Functions A1C  Function Patterns—Parent functions (ex: Pool Problem + Mosaics) A3A & B, A5 A, B, C, A9A, A11B  **Intro to Linear Functions (12 days)**  Introduction to Linear Functions A2A, A5A  Graph Linear Equations A5A  Find Slope/Rate of Change A6A & F  Direct Variation A6G  Understanding Slope and Y-Intercept (Slope-Intercept Form) A6B, C & F | **Graphing Linear Functions (12-13 days)**  Graph Linear Functions A2A, A4C  Y-Intercept (Writing Slope-Intercept Form) A6A & F  Y-Intercept (With X and Y Intercepts) A6D & G  Use Slope-Intercept Form A6C & F  Graph Using Slope-Intercept Form A6C, D, F  Point-Slope Form A6D  Trend Lines & Fit a Line to Data A1B  Predict with Linear Models A1B, A2D  **Systems of Equations (12 days)**  Intro to Solving Systems A8A  Solving Systems by Substitution, Elimination A8B  Solving Systems by Graphing and Using Tables A8B  Special Types of Systems (include parallel lines) A8BC | **Inequalities (11 days)**  Solving Inequalities by  Addition and Subtraction A7B - C  Solving Inequalities by Multiply and Divide  A7B - C  Solving Multi-Step Inequalities A7B - C  Solving Compound Inequalities A7B - C  Graphing Linear Inequalities in Two Variable A7B  **Exponential Growth and Decay (6 days)**  Explore Exponential Growth graphs A11C  Explore Exponential Growth real world application A11A  Explore Exponential Decay graphs A11C  Explore Exponential Decay real world application A11A | **Polynomial Functions (10 days)**  Graphing and Solving Quadratic Equations A2A, A9A - D  Adding and Subtracting Polynomials (Algebra Tiles) A4A  Multiplying Polynomials A4A - B  Special Products of Polynomials A4A - B  **Factoring Quadratic Functions (14 days)**  Intro Factoring GCF  A4A – B  Factoring Trinomials  A4A – B  Special Factors (Difference of Perfect Squares) A4A – B  All Types of Factoring A4A - B | **Solving Quadratic Equations (13 days)**  Solve quadratics by graphing A10A  Solve all types of factoring A10A - B  Solve quadratics using square roots A10A - B  Solve using the quadratic formula A10A-B    **End of Course Preparation (5 days)**  Foundations of Functions  A1A, A2A, A3A, A4A  Linear Functions  A5A, A6A, A7A, A8A  Quadratic and Other Nonlinear Functions  A9A, A10A, A11A  (all TEKS) |